

LOS ANGELES  
COUNTY  
RECORDER  
MAY 23 '91

LOS ANGELES COUNTY RECORDER'S OFFICE  
P.O. BOX 115, LOS ANGELES, CA 90053-0115 / (213) 974-6611

RECORDING RECEIPT

0112 MAY 23 '91  
RECORD 59.00  
TOTL 59.00  
CASH 60.00  
CHNG 1.00  
NR0120 1

RECEIVED FOR RECORD ON

MAY 23 1991

91- 761651

TO

INCL

REGISTRAR-RECORDER/COUNTY CLERK

SURVEY MONUMENT.

BY

DEPUTY

TOTAL

75R100 4/91

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Recording Requested By:

Southern California Gas Company

When Recorded, Mail To:

Southern California Gas Company  
Environmental Affairs Analyst  
Post Office Box 3249  
Terminal Annex  
Los Angeles, CA 90051

COVENANT  
TO RESTRICT THE USE OF  
THE SOUTHERN CALIFORNIA GAS COMPANY  
FORMER MANUFACTURED GAS PLANT SITE  
(OLYMPIC BASE)  
(CONSENT ORDER HSA 86/87-014-RA)

This Covenant and Agreement ("Covenant") is made on the 23rd day of April, 1991 by Southern California Gas Company ("Covenantor"), who is the owner of record of certain property ("the Property") situated in the City of Los Angeles, County of Los Angeles, State of California, a portion of which contains hazardous substances resulting from the former operation of a manufactured gas plant ("the Site"), both of which are described in Exhibit "A" attached hereto and incorporated herein by reference, and by the California Department of Health Services ("the Department") with reference to the following facts:

- A. The Site contains hazardous substances, more specifically, by-products from gas manufacture which occurred at the Site during the early part of the twentieth century. High pressure gas transmission lines owned by Covenantor,

traverse the southern portion of the Site and are delineated in the map included in Exhibit A.

- B. The Site is currently owned by Covenantor. The former manufactured gas plant was operated by Covenantor. The Site occupies approximately four acres in the City of Los Angeles and is part of a larger 14 acre facility, the Olympic Base, operated by Covenantor.

Results of the Remedial Investigation (RI) conducted at the Site indicate that the primary contaminants associated with gas plant by-products are polycyclic aromatic hydrocarbons (PAHs), cyanide and metals. The Department considers the PAHs to be the contaminant of primary concern. Available information indicates that groundwater exists at a depth in excess of 200 feet below the Site and shows that the manufactured gas plant residue have not contaminated groundwater. It is estimated that it would take the PAHs 458 to one million years to migrate through the unsaturated sediment to the groundwater.

After consideration of numerous remedial action alternatives, the conclusion reached in the Feasibility Study was that placement of an asphalt cap over the Site is the preferred remedial alternative. This alternative will contain the contamination, will virtually eliminate all pathways of concern for exposure to the public and workers,

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and will reduce health risks to an acceptable level as defined by regulatory standards.

- C. Covenantor desires and intends that in order to protect the present and future public health and safety, the Site shall be used in such a manner so as to avoid potential harm to persons or property which may result from the manufactured gas plant hazardous substances which have been deposited on the Site and have been identified in the RI and addressed in both the Feasibility Study and the Remedial Action Plan (RAP). To this end, the restrictions in this document are intended to assure that the integrity of the asphalt cap is not compromised and to provide notice of certain monitoring, maintenance and reporting requirements applicable to the Site pursuant to the RAP that has been approved by the Department.

#### ARTICLE I

#### GENERAL PROVISIONS

1.01 Provisions to Run With the Land. This covenant sets forth protective provisions, covenants, restrictions, and conditions (collectively referred to as "Restrictions"), upon and subject to which the Site and every portion thereof shall be improved, held, used, occupied, leased, sold, hypothecated, encumbered, and/or conveyed. Each and all of the Restrictions shall run with the land and pass with each and every portion of the Site and shall

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apply to and bind the respective successors in interest of Covenantor. Each and all of the Restrictions are imposed upon the entire Site unless expressly stated as applicable to only a portion of the Site. Each and all of the Restrictions are imposed pursuant to Sections 25355.5 and 25356.1 of the California Health & Safety Code and run with the land pursuant to Section 25355.5. Each and all of the Restrictions are enforceable by the Department.

1.02 Concurrence of the Owners Presumed. All purchasers, lessees, or possessors of any portion of the Site shall be deemed by their purchase, leasing or possession of the Site to be in accord with the foregoing and to agree for and among themselves, their heirs, successors, and assignees, and the agents, employees, and lessees of such owners, heirs, successors, and assignees, that the Restrictions herein established must be adhered to for the benefit of future Owners and Occupants and their interest in the Site shall be subject to the Restrictions contained herein.

1.03 Incorporation Into Deeds and Leases. Covenantor desires and covenants that the Restrictions set out herein shall be incorporated by reference in each and all deeds and leases of any portion of the Site.

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ARTICLE II  
DEFINITIONS

2.01 Department. "Department" shall mean the California State Department of Health Services and shall include its successor agencies, if any.

2.02 Improvements. "Improvements" shall mean all buildings, roads, driveways, regradings, and paved parking areas, constructed or placed upon any portion of the Site.

2.03 Occupants. "Occupants" shall mean those persons entitled by ownership, leasehold, or other legal relationship to the exclusive right to occupy any portion of the Site.

2.04 Owner. "Owner" shall mean the Covenantor or its successors in interest, including heirs, and assigns, who hold title to all or any portion of the Site.

ARTICLE III  
DEVELOPMENT, USE, AND CONVEYANCE OF THE SITE

3.01 Restrictions On Use. Covenantor promises to restrict the use of the Site as follows: (1) the Site must be covered with an asphalt cap pursuant to Section 6.2 of the RAP approved by the Department, attached hereto as Exhibit B and incorporated herein by reference, and applicable sections of the Remedial Action Workplan when approved by the Department. This Covenant will be

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supplemented with the approved and applicable sections of the Workplan which will be Exhibit D and incorporated herein by reference upon recordation. The Site, so improved with the asphalt cap, may be used as a parking lot and may be otherwise improved with, for example, buildings which may be used for any purpose, except as hereinafter specifically provided, so long as the integrity of the asphalt cap is not compromised. The Site shall not be used, absent Department approval, for residential purposes, schools, child care facilities, convalescent homes and/or any other facility for full time human habitation. If any person wishes to use the Site for purposes of human habitation, the Department may require further investigation, including, but not limited to, evaluation of the risk to occupants of such facilities, feasibility of construction of such facilities, and the impact of construction of such facilities on the surrounding community.

Notwithstanding the foregoing, the asphalt cap may be disturbed by the Covenantor in the event of an emergency for the purpose of maintaining and/or repairing those high pressure gas transmission lines which underlie the southern portion of the Site and which are delineated on the map included in Exhibit A. In the event of such emergency, Covenantor shall give notice to the Department within two working days following the occurrence of such emergency and shall provide the Department with a written report within 20 working days following the emergency, explaining the nature of the emergency and describing the action(s) Covenantor

took. All work performed on the Site during and following the emergency until such time as the asphalt cap is fully repaired, shall be undertaken in conformance with all applicable legal requirements and standards for worker safety, for the storage, handling and disposal of hazardous materials, and for emission control and dust control. All material that is removed from below the asphalt cap on the Site shall be tested and disposed pursuant to all applicable legal requirements. As soon as reasonably possible following the emergency repair and maintenance of the gas transmission pipeline(s), Covenantor shall repair the asphalt cap pursuant to the requirements contained in Exhibit B, and in accordance with standard engineering practices. Covenantor promises to perform the monitoring, maintenance, reporting and inspection provided for in Chapter 9 of the approved Remedial Action Plan for the periods of time provided therein. Said Chapter 9 is attached hereto as Exhibit C and incorporated by reference.

3.02 Conveyance of Site. The Owner or Owners shall provide a thirty (30) day advance notice to the Department of any sale, lease, or other conveyance, excluding encumbrances, of the Site or an interest in the Site to a third person. The Department shall not, by reason of the Covenant, have authority to approve, disapprove, or otherwise affect any sale, lease, or other conveyance of the Site, but nothing herein shall prevent the Department from enforcing the provisions of the Covenant.



3.03 Enforcement. Failure of the Owner to comply with any of the requirements, as set forth in paragraph 3.01 shall be grounds for the Department, by reason of the Covenant, to require that the Owner modify or remove any Improvements constructed in violation of that paragraph. Violation of the Covenant shall be grounds for the Department to file civil and criminal actions against the Owner as provided by law.

3.04 Notice in Agreement. All Owners and Occupants shall execute a written instrument which shall accompany all purchase, lease, sublease, or rental agreements relating to the Site. The instrument shall contain the following statement:

"The land described herein contains hazardous substances associated with the former operation of a manufactured gas plant. A Covenant to Restrict the use of said land has been recorded and is applicable to said land. Failure of owners and occupants of said land to comply with the Covenant subject the owners and occupants to civil and criminal enforcement by the Department and renders the land and the owner, lessee, or other possessor of the land subject to requirements, restrictions, provisions, and liabilities contained in Chapter 6.5 and Chapter 6.8 of Division 20 of the Health and Safety Code. This statement is not a declaration that a hazard exists."

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ARTICLE IV  
VARIANCE AND TERMINATION

4.01 Variance. Any Owner or, with the Owner's consent, any Occupant of the Site or any portion thereof may apply to the Department for a written variance from the provisions of this Covenant. Such application shall be made in accordance with Section 25233 of the California Health and Safety Code.

4.02 Termination. Any Owner or, with the Owner's consent, an Occupant of the Site or a portion thereof may apply to the Department for termination of the restrictions as they apply to all or any portion of the Site. Such application shall be made in accordance with Section 25234 of the California Health and Safety Code.

4.03 Term. Unless terminated in accordance with paragraph 4.02 above, by law or otherwise, this Covenant shall continue in effect in perpetuity except as otherwise specifically provided in paragraph 3.01 or the documents incorporated by reference into said paragraph of the instant agreement.

ARTICLE V  
MISCELLANEOUS

5.01 No Dedication Intended. Nothing set forth herein shall be construed to be a gift or dedication, or offer of a gift or

dedication, of the Site or any portion thereof to the general public or for any purposes whatsoever.

5.02 Notices. Whenever any person gives or serves any notice, demand, or other communication with respect to this Covenant, each such notice, demand, or other communication shall be in writing and shall be deemed effective (1) when delivered, if personally delivered to the person being served or to an officer of a corporate party being served or official of a government agency being served, or (2) three (3) business days after deposit in the mail if mailed by United States mail, postage paid certified, return receipt requested:

To: Southern California Gas Company  
c/o Vice President Engineering and Operations Support  
Post Office Box 3249  
Terminal Annex  
Los Angeles, California 90051

Copy To: Department of Health Services  
Toxic Substances Control Program  
Regional Office  
1405 North San Fernando Boulevard  
Suite 300  
Burbank, California 91504

5.03 Partial Invalidity. If any portion of the Restrictions set forth herein or terms is determined to be invalid for any reason, the remaining portion shall remain in full force and effect as if such portion had not been included herein.

5.04 Article Headings. Headings at the beginning of each numbered article of this Covenant are solely for the convenience of the parties and are not a part of this Covenant.

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5.05 Recordation. This instrument shall be executed by the Covenantor and by the Regional Administrator, Region 3, Toxic Substances Control Program, California Department of Health Services. This instrument shall be recorded by the Covenantor in the County of Los Angeles within thirty (30) days of the date of execution.

5.06 References. All references to Code sections include successor provision.

IN WITNESS WHEREOF, the parties execute this Covenant as of the date set forth above.

COVENANTOR  
SOUTHERN CALIFORNIA GAS COMPANY

BY: Lee Harrington  
Lee Harrington  
Senior Vice President

DEPARTMENT OF HEALTH SERVICES

BY: Dennis Dickerson  
Dennis Dickerson  
Regional Administrator, Region 3,  
Toxic Substances Control Program  
Department of Health Services

DATE: April 23, 1991

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**CORPORATE ACKNOWLEDGMENT**

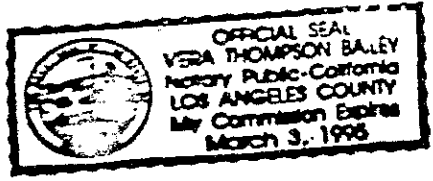
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State of CALIFORNIA  
County of Los Angeles } SS.

On this the 14th day of May 1991, before me,

Vera Thompson Bailey  
the undersigned Notary Public, personally appeared

Lee K. Harrington



☒ personally known to me  
☐ proved to me on the basis of satisfactory evidence  
to be the person(s) who executed the within instrument as  
Senior Vice President or on behalf of the corporation therein  
named, and acknowledged to me that the corporation executed it.  
WITNESS my hand and official seal.

Vera Thompson Bailey  
Notary's Signature

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to another document.

THIS CERTIFICATE  
MUST BE ATTACHED  
TO THE DOCUMENT  
DESCRIBED AT RIGHT.

Title or Type of Document Covenant-Consent Order HSA 86/87-014-RA  
Number of Pages 31 Date of Document April 23, 1991  
Signer(s) Other Than Named Above Dennis Dickerson (DHS)

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**INDIVIDUAL ACKNOWLEDGMENT**

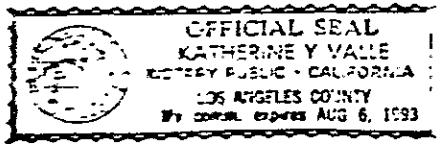
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State of California  
County of Los Angeles } SS.

On this the 22 day of May 1991, before me,

Katherine Y. Valle  
the undersigned Notary Public, personally appeared

Dennis Dickerson



☐ personally known to me  
☒ proved to me on the basis of satisfactory evidence  
to be the person(s) whose name(s) is subscribed to the  
within instrument, and acknowledged that he executed it.  
WITNESS my hand and official seal.

Katherine Y. Valle  
Notary's Signature

ATTENTION NOTARY: Although the information requested below is OPTIONAL, it could prevent fraudulent attachment of this certificate to another document.

THIS CERTIFICATE  
MUST BE ATTACHED  
TO THE DOCUMENT  
DESCRIBED AT RIGHT.

Title or Type of Document Covenant - Consent Order HSA 86/87-014-RA  
Number of Pages 31 Date of Document April 23, 1991  
Signer(s) Other Than Named Above Lee Harrington

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"THE PROPERTY"

All that real property in the City of Los Angeles, County of Los Angeles, State of California, described as follows:

That portion of Lots A, C, D and E, of Tract No. 8769, as per map filed in Book 122, pages 36 and 37, inclusive, of Maps, in the office of the Recorder of the County of Los Angeles, and as shown on map filed in Book 52, pages 5-8 inclusive of Records of Surveys in the office of said County Recorder lying within the following described boundary:

Beginning at the northwest corner of said Lot "C"; thence South 03°01'30" West along the westerly line of said Lot "C", 10.01 feet to a point in a line parallel with and 10.00 feet southerly, measured at right angles, from a northerly line of said Lot "C", thence South 89°33'00" East, along said parallel line, 2.00 feet to the True Point of Beginning in the easterly line of an Alley, 17.00 feet in width; thence continuing South 89°33'00" East from said true point of beginning along said parallel line, 118.00 feet; thence South 00°27'00" West, 9.00 feet; thence South 89°33'00" East, 439.92 feet to a point in the easterly line of said Lot "E", said point being distant South 00°27'00" West along said easterly line of Lot "E", 9.00 feet from the northeast corner of said Lot "E"; thence South 00°27'00" West along said easterly line of Lot "E", 292.26 feet to the southeast corner of said Lot "E", said corner also being a point in a northerly line of said Lot "A"; thence South 89°24'00" East from said southeast corner of Lot "E" along said northerly line of Lot "A", 313.55 feet to the northeast corner of said Lot "A"; thence South 10°47'25" East along the easterly line of said Lot "A", 539.91 feet to the southeast corner of said Lot "A"; thence North 89°26'00" West along a southerly line of said Lot "A", 776.02 feet to a southwesterly corner of said Lot "A", said corner also being the southeast corner of Lot 1, of Tract No. 8016, as said Lot 1 is shown on map recorded in Book 179, page 7, of Maps, in the office of said Recorder; thence North 03°01'30" East from said last mentioned corner along a westerly line of said Lot "A", which is also the easterly line of said Lot 1 and its northerly prolongation, 199.97 feet to a corner of Lot "A"; thence North 89°25'40" West from said last mentioned corner along another southerly line of said Lot "A", 233.00 feet to another southwesterly corner of said Lot "A", said last mentioned southwesterly corner also being a point in a line parallel with and 2.00 feet easterly, measured at right angles, from the westerly lines of said Lots "A" and "C", said parallel line also being the easterly line of said Alley, 17.00 feet in width; thence North 03°01'30" East along said last mentioned parallel line and said easterly line of Alley, 630.42 feet to the True Point of Beginning."

**"THE SITE"**

THAT PORTION OF LOT A OF TRACT NO. 8769, IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 122, PAGES 36 AND 37 OF MAPS IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY, DESCRIBED AS FOLLOWS:

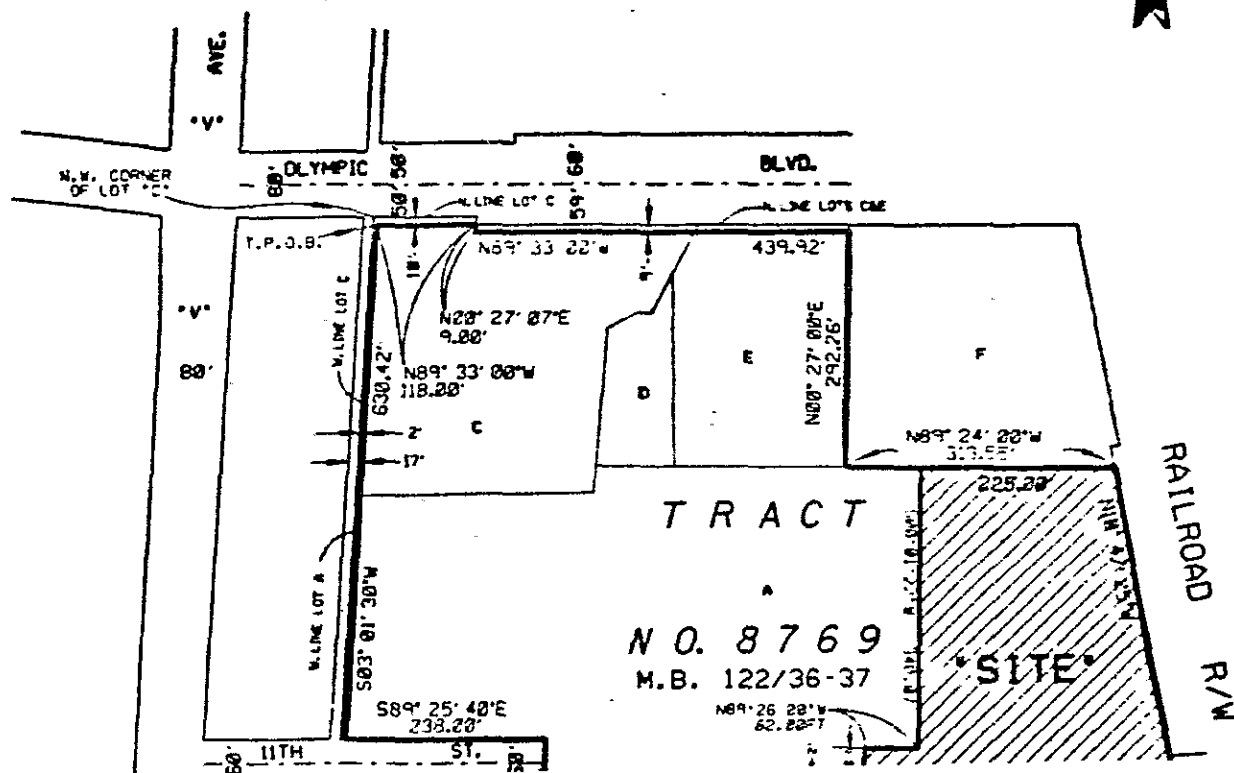
BEGINNING AT THE SOUTHEAST CORNER OF SAID LOT A; THENCE ALONG THE EASTERLY LINE OF SAID LOT, NORTH 10°47'25" WEST 539.91 FEET TO THE NORTHEASTERLY CORNER OF SAID LOT; THENCE ALONG THE NORTHERLY LINE OF SAID LOT, NORTH 89°24'00" WEST 225.00 FEET; THENCE SOUTH 0°01'22" WEST 340.07 FEET; THENCE NORTH 89°26'00" WEST 62.00 FEET; THENCE SOUTH 5°04'00" WEST 190.00 FEET TO A POINT IN THE SOUTHERLY LINE OF SAID LOT; THENCE ALONG SAID SOUTHERLY LINE, SOUTH 89°26'00" EAST 107.00 FEET; THENCE NORTH 88°36'40" EAST 58.43 FEET; THENCE NORTH 82°24'36" EAST 37.95 FEET; THENCE NORTH 80°49'44" EAST 40.00 FEET; THENCE NORTH 83°17'53" EAST 28.58 FEET; THENCE NORTH 86°56'42" EAST 30.05 FEET; THENCE SOUTH 86°06'55" EAST 39.57 FEET; THENCE SOUTH 79°01'02" EAST 28.89 FEET; THENCE SOUTH 70°57'07" EAST 38.32 FEET TO THE POINT OF BEGINNING.

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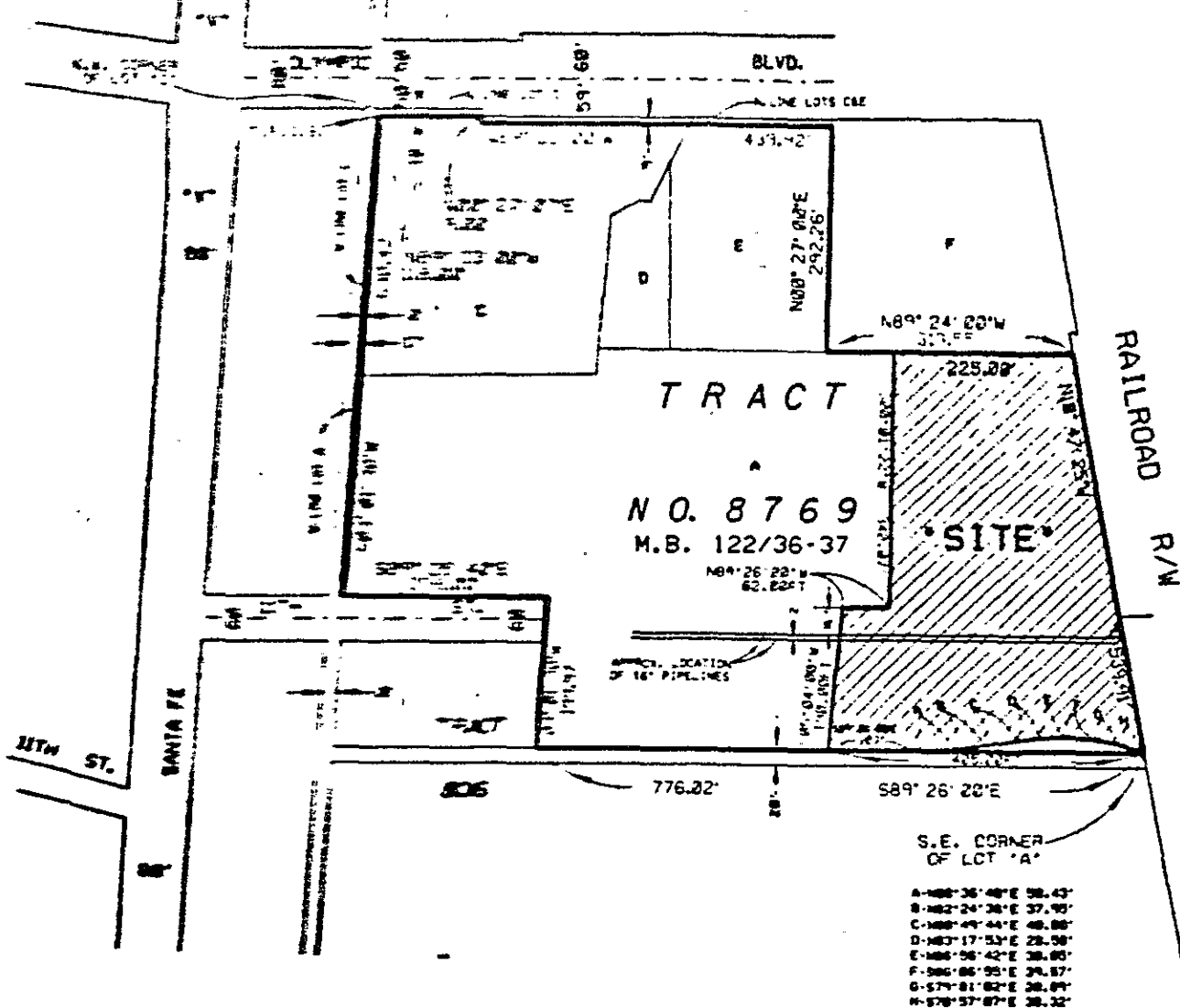
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SECTION	TOWNSHIP	RANGE	B.&M.







**NOTE:**  
THIS PROPERTY MAP WAS COMPILED  
FROM RECORD DATA.

**EXHIBIT 'A'**  
**'THE PROPERTY'**

SOUTHERN CALIFORNIA GAS COMPANY

PLAT ACCORDING TO LEGAL DESCRIPTION	SCALE 1" = 200 FT.
IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES	A.S.
	DRWN. R.G. CHOD. R.R.
	DATE: 11-20-90
APPROVED: <i>[Signature]</i> SUPERVISOR OF SPECIAL PROJECT SERVICES	REV'D. 3-19-91 R.S.
	PRF: THE SITE

SECTION TOWNSHIP RANGE S.W.

PORTION OF LOT A  
TRACT NO. 8769  
MB 122-36/37  
LOS ANGELES CA.

**NOTE:**

\*A SITE MAP  
IS BASED ON AN  
ACTUAL FIELD SURVEY.

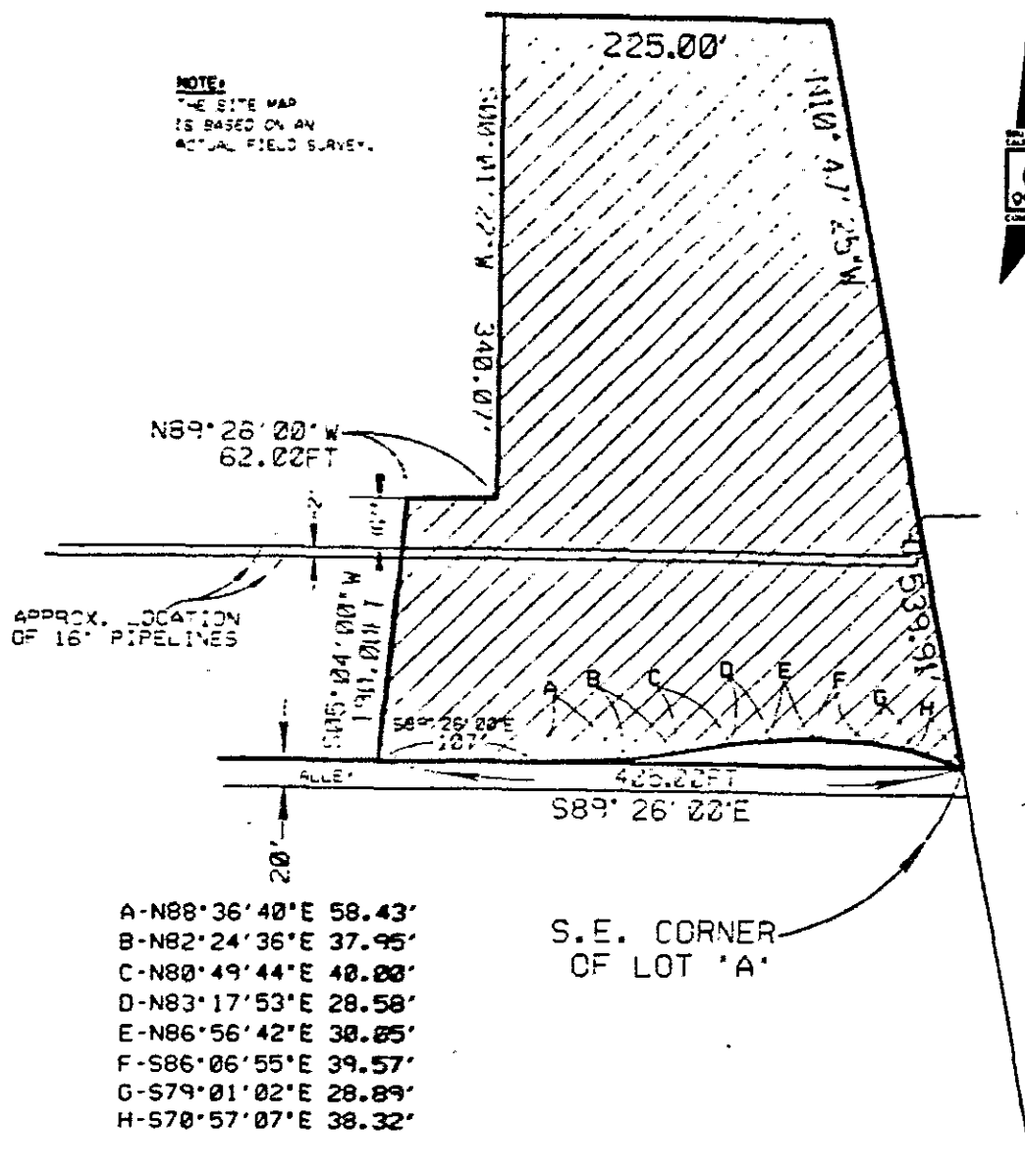


EXHIBIT 'A'  
'THE SITE'

SOUTHERN CALIFORNIA GAS COMPANY

PLAT ACCOMPANYING LEGAL DESCRIPTION	SCALE 1\" = 122 FT.
IN THE CITY OF LOS ANGELES, COUNTY OF LOS ANGELES	A.S.
	DRAWN, R.G. CHKD, R.R.
APPROVED: <i>[Signature]</i>	DATE: 11-20-98
	PRF: THES:TE

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## EXHIBIT B

saturated, thereby affecting the contamination left in place. However, this likelihood has been shown to be exceedingly low (Section 5.3). To provide additional safeguards that ground water conditions do not change, quarterly monitoring for saturation will be conducted, and an annual report prepared.

### 6.1.7.5 Environmental Impacts

Some air emissions can be expected during fixation activities. The environmental impacts from these emissions will be the lowest of all alternatives, except Alternative 1 (No Action/Limited Action). Following remediation, the bulk of site contaminants will have been fixed in place. Also, the airborne pathway will be eliminated. Therefore, the overall environmental impacts of this alternative are insignificant.

### 6.1.7.6 Justification for Rejection/Selection

The implementation of this alternative is constrained to a large extent by the presence of underlying rubble and debris. Overall, applying a topsoil cap with vegetation over fixated soil is somewhat difficult. For these reasons, this alternative was rejected from further consideration.

## 6.2 RECOMMENDED FINAL REMEDIAL ACTION

Alternative 4 (Asphalt Cap) was selected as the recommended remedial alternative. This alternative consists of placing an impervious asphalt cap over the contaminated material at the Olympic Base site.

The waste material is in two locations on the site, comprising a total area slightly exceeding 8,200 square yards. As shown on Figure 7, one continuous cap will be placed over both areas of contamination and the intervening area. The asphalt cap will cover nearly 20,000 square yards.

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### 6.2.1 JUSTIFICATION FOR SELECTION

The asphalt cap was selected as the recommended remedial alternative for the site because it will act as a barrier in preventing exposure of humans and other biological receptors to contaminants left in place. As indicated in the Health Risk Assessment (ENVIRON, 1990), such a barrier will:

- o Eliminate airborne migration of contaminants;
- o Prevent rain water from entering the waste material and carrying the contamination to the underlying aquifer; and
- o Prevent exposure of off-site workers and residents and onsite workers by ingestion of, and dermal contact with the material.

The Asphalt Cap alternative is preferable to the No Action (Limited Action) alternative in that it addresses all exposure pathways. The No Action (Limited Action) alternative would not do this. The Asphalt Cap alternative is preferable to Alternatives 3, 5, and 6 because they all have the potential for significant environmental impacts to occur as the result of emissions during excavation and grading. The emissions associated with the asphalt cap will not be significant. The Asphalt Cap alternative is preferable to the Multi-Layered Cap alternative because it will allow future vehicular use of the site. The Asphalt Cap alternative is preferable to Alternative 3, 6, and 7 because it includes a well-demonstrated technology which is highly reliable. The Asphalt Cap alternative is also preferable to all alternatives, except Alternative 1 (No Action/Limited Action), because it is cost effective.

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### 6.2.2 DESIGN ACTIVITIES

The asphalt cap will be designed so as to be compatible with existing and potential land uses. The asphalt, which covers the area currently occupied by the asphalt plant in the northern portion of the site, and the brick buildings in the southern portion of the site, will be inspected for acceptability. If acceptable, the asphalt cap will be designed to tie into the pre-existing asphalt in these areas. If not acceptable, the asphalt in these areas will be repaired or replaced and the cap for the site designed accordingly.

The cap will have an overall slope of one percent. Runoff will be collected in one or more concrete-lined ditches which run perpendicular to the direction of run-off flow. Runoff will be directed to a lined impoundment and pumped into the nearest storm drain.

Prior to initiation of design, the type and frequency of traffic use will be evaluated. Based on the results of this evaluation, two typical cross-sections for the asphalt cap will be considered (Figure 8). One, designated No Traffic, is satisfactory for areas with little or no traffic, such as parking lots for passenger cars. The other is intended for light traffic areas and can accommodate occasional delivery trucks. At a minimum, the asphalt cap would consist of a 4-inch paving course beneath a 1-inch finishing course.

The design phase will conclude with the preparation of bid documents which include the construction plans and specifications for the asphalt cap. The bid documents will indicate what debris must be removed and the proper disposition of this material. Limits for all excavation associated with the relocation of underground water lines will be given. Procedures for excavation

in contaminated soil will be described. If any excavated material cannot be used as fill on the site, then proper disposition of this material will be specified. Also, appropriate dust control and air monitoring during construction will be specified.

#### 6.2.3 CONSTRUCTION ACTIVITIES

Prior to construction, buildings and other features to remain in place onsite will be identified, marked and protected as specified, and air quality monitoring stations will be established. Then the surface to be paved will be cleared of all vegetation, debris, and large rocks. All underground water lines will be relocated at this time. Previously abandoned underground utilities will either be grouted in place or removed. If the future use of the site is such that the buried debris must be removed (i.e., the presence of debris makes the integrity of the cap questionable), it will be removed and disposed at this time.

The surface will be graded to final contours and compacted as specified. Any concrete work such as curbs and gutters will be installed. Any aggregate base that may be required will be placed and rolled. The base course of asphalt will then be placed and rolled. The finish course of asphalt will be placed and rolled smooth to complete the cap. Any items required to use the site as intended, such as signs, and painting to delineate traffic lanes and parking stalls will be added at this time.

#### 6.2.4 CONSTRUCTION MONITORING

During the construction period, air monitoring will be conducted. This will include real time monitoring of organic contaminants in the working zone with an Organic Vapor Analyzer or similar device, and monitoring of respirable particulate matter with a mini-RAM or similar device. It will also include monitoring for airborne particulate matter with three high volume air samplers. One sampler would be located upwind of the site, and two

samplers would be located downwind of the site. Samples from these monitoring stations would be analyzed for polycyclic aromatic hydrocarbons, lead, and cyanide. To ensure the proper placement and operation of air monitoring samplers, a meteorological station would be established onsite prior to initiating construction. The station would record wind direction and speed.

Any additional monitoring imposed by permit conditions or required by the Health and Safety Plan will also be performed. All personnel onsite will be equipped with personal protective equipment specified in the Health and Safety Plan.

#### 6.2.5 ENVIRONMENTAL IMPACTS

During asphalt capping operations, a temporary increase in dust production could result. This could lead to inhalation of and/or dermal contact with contaminated dust by onsite workers, or inhalation of the contaminated dust by off-site residents, workers and/or environmental receptors. The same scenarios are likely during cap repair, but to a much lesser extent and intensity. In either case, appropriate air monitoring for airborne particulates would be conducted. Should levels of contaminants detected be above permissible levels, all construction-related activities would cease immediately. Dust control, including the use of water trucks, would be used as appropriate. Using the wind speed and direction devices mentioned above, construction activities would cease immediately if wind speed is above a pre-set limit or if wind is blowing in an unfavorable direction. Onsite workers would be appropriately outfitted to prevent inhalation of and/or dermal contact with contaminants. Signs would be posted around the site during construction to inform the public and SoCalGas employees of safety risks (i.e., open trenches during rerouting of underground water lines).

The Asphalt Cap alternative affords substantial long-term protection of public health, welfare, and the environment. From

the results of the Health Risk Assessment document, it can be seen that asphalt capping virtually eliminates airborne migration of contaminants, drastically reduces infiltration of surface water, and virtually eliminates the risk of ingestion and dermal contact for on-site workers, residents, and off-site workers. Moreover, the potential for saturation of the underlying aquifers is exceedingly low, and thus present and future uses of ground water are not of significant concern.

Overall, if the mentioned above are implemented during construction and maintenance activities, the Asphalt Cap alternative will not result in significant adverse impacts to the environment.

#### 6.2.6 CONSISTENCY WITH 25356.1(C) OF HEALTH & SAFETY CODE

Subdivision (c) of Chapter 6.8, Section 25356.1 of the Health and Safety Code states that Remedial Action Plans for sites on the Hazardous Substance Account or Hazardous Substance Cleanup Fund list must be prepared and approved in a manner consistent with the National Oil and Hazardous Substances Pollution Contingency Plan and all of the following:

1. Health and safety risks posed by conditions of the site.
2. Effect of contamination upon present, future, and probably beneficial uses of resources.
3. The effect of alternative remedial action on reasonable availability of ground water resources for present, future, and probably beneficial uses.
4. Site specific characteristics including off-site migration, surface and subsurface soil, and hydrogeological conditions.



5. Cost effectiveness of alternative remedial action.
6. The potential environmental impacts of the alternative remedial action.

The Feasibility Study has considered all of the above-mentioned factors in the detailed analyses of final candidate alternatives and the selection of asphalt capping as the final recommended remedial alternative (Dames & Moore, 1990). The selection of the Asphalt Cap is supported by the Health Risk Assessment and is an effective and viable remedy for the protection of public health and the environment (ENVIRON, 1990).

#### 6.2.7 COMPLIANCE WITH 40 CFR 260-270

Parts 264, 265, 266, 267, and 270 of Title 40 Code of Federal Regulations do not apply to the site and/or recommended remedial alternative since neither can be designated as a Treatment, Storage, or Disposal Facility. Parts 262 and 263 do not apply as there is no off-site disposal/treatment involved. Part 268, pertaining to land disposal restrictions, also does not apply because it is not anticipated that any of the contamination from the site which may be subject to land ban restrictions will require land based disposal.

#### 6.2.8 COMPLIANCE WITH COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT SECTION 101 (24)

Section 101 (24) of Comprehensive Environmental Response, Compensation, and Liability Act states that the terms "remedy" or "remedial action" mean those actions consistent with permanent remedies taken instead of, or in addition to, removal actions in the event of a release or threatened release of a hazardous substance into the environment, to prevent or minimize the release of hazardous substances so that they do not migrate to cause substantial danger to present or future health or welfare or the

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environment. The use of these terms in this Remedial Action Plan are consistent with this definition. Therefore, this Remedial Action Plan and the recommended remedial action it proposes is in compliance with this statute.

#### **6.2.9 HEALTH AND SAFETY PLAN**

As mandated, a site-specific Health and Safety Plan will be developed and implemented prior to the construction and maintenance of the asphalt cap in order to meet the requirements of Title 29 Code of Federal Regulations Section 1910.120(i)(2). The Health and Safety Plan will assign responsibilities, establish personnel protection standards and mandatory safety procedures, and provide for contingencies that may arise while operations are being conducted at the site. This plan will be developed during the remedial design phase. The Health and Safety Plan will be reviewed and approved by the Department and implemented prior to construction of the asphalt cap.

The main components of the Health and Safety Plan will include:

1. Names of key personnel and alternates responsible for site safety and health, and appointment of a Site Safety Officer;
2. Safety and health risk analysis for each task within the capping period and during the periodic maintenance intervals;
3. Employee training assignments;
4. Medical surveillance requirements;
5. Frequency and types of air monitoring, personnel monitoring, and contaminant sampling techniques;
6. Site control;

7. Decontamination; and

8. A Contingency Plan meeting the requirements of paragraphs (1)(1) and (1)(2) of Title 29 Code of Federal Regulations Section 1910.120 for safe and effective responses to emergencies including necessary personnel protective equipment.

### 6.3 CONCLUSIONS

The Feasibility Study identified and screened several remedial technologies. These were assembled into 17 alternatives. These alternatives were screened, and seven were selected as final candidate alternatives to undergo detailed analysis. Following this analysis, the Asphalt Cap alternative was selected as the recommended remedial alternative for use on the site (Dames & Moore, 1990). It is cost-effective, quick and relatively easy to implement, uses a well-demonstrated technology, presents no significant impacts to current or future use of ground water or the environment, is protective of public health, and is reliable. It complies with all applicable laws and regulations. It will be designed, installed, and maintained according to standard engineering practice in a manner consistent with future site use and a Health and Safety Plan, to be reviewed and approved by the Department. Post-construction activities include monitoring of existing ground water wells for saturation, cap inspection to ensure protection of public health, and annual reporting. SoCalGas will place a deed restriction on the property to ensure that future land uses must be reviewed and approved by the Department.

## EXHIBIT C

### 9.0 ONGOING OPERATION AND MAINTENANCE REQUIREMENTS

#### 9.1 POST-CONSTRUCTION ACTIVITIES

##### 9.1.1 MONITORING ACTIVITIES

The two vadose zone wells currently onsite will be monitored quarterly for any saturation. The frequency of monitoring may be reduced, with the Department review and approval, after the first 1 to 1-1/2 years, depending on the results of this activity. An annual monitoring report will be prepared and submitted to the Department. Should liquids be encountered in either well, monitoring activities will be expanded to satisfy additional requirements set forth by the Department.

##### 9.1.2 INSPECTION

A Site Supervisor will be designated by a proposed letter to the Department within 30 days of the approval of the Operations and Maintenance Plan. This letter will include the rationale for choice of the Site Supervisor. The Department has final approval of the proposed Site Supervisor.

The Site Supervisor will be responsible for reporting any unusual conditions, such as ponded water after rainfall or vegetation growing through the cap immediately upon observation.

The entire cap, including the less traveled areas, will be visually inspected annually for cracks or other signs that the integrity of the cap has been compromised. A monitoring report will be submitted to the Department and will include the results of the annual inspection, any unusual conditions reported, and a description of the repair activities undertaken, including their location and extent.

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### 9.1.3 REPAIRS

Common paving tools, methods, and materials will be used to repair the cap. Unless the cap is penetrated or removed, personal protective equipment will not be required. Any repairs that involve exposing the contaminated material will require air/vapor monitoring to be conducted and workers to be protected as specified in the Health and Safety Plan.

Most repairs of cracks, which do not extend through the entire thickness of the cap, are expected to be of the cold patch type. For small jobs of this type the material is placed by shovel and hand held tampers are used. Somewhat larger jobs, or jobs where cracks are extensive and maximum protection from water infiltration is necessary, may require the use of rollers to compact the material. The inspection program should prevent the deterioration of the cap to such an extent that more involved repair techniques will be unnecessary.

### 9.1.4 REPLACEMENT

The Feasibility Study assumed a useful life of 10 years for the cap (Dames & Moore, 1990). Under worst case assumptions, the entire cap would be removed and replaced at the end of this time. In actuality, it may not be necessary to remove the entire cap. Only those areas showing significant deterioration may need to be removed. Those areas where the cracks have extended through the entire thickness of the cap could be saw-cut and then removed. In areas where the cracks are superficial, only a portion of the surface may need to be removed and replaced. It is possible that in some areas, only a new seal coat will need to be applied. However, it is not possible at this time to predict how much of the cap can be salvaged. Therefore, the 30-year present worth analysis assumes replacing the entire cap twice, once after 10 years and once after 20 years.

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## 9.2 DURATION OF POST-CONSTRUCTION ACTIVITIES

For the purpose of the detailed analysis conducted during the Feasibility Study, a 30-year lifetime was assumed for the Asphalt Cap (Dames & Moore, 1990). It is assumed that no post-construction monitoring or maintenance activities will be required after this time.

## 9.3 COST OF POST-CONSTRUCTION ACTIVITIES

The present-worth cost of monitoring for saturation for thirty years, preparing an annual monitoring report for thirty years, conducting annual maintenance on the asphalt cap for thirty years, and replacing the entire cap once every ten years for thirty years is approximately \$674,360. The source of financing for this work will be SoCalGas.

## 9.4 PERFORMANCE ASSURANCE

Submittal of annual monitoring, inspection, and repair reports to the Department will assure that SoCalGas has conducted all post-construction activities (i.e., monitoring and maintenance) in accordance with the provisions of the Remedial Action Plan.

## 9.5 FUTURE DISCOVERIES OF CONTAMINATION

If additional contamination is discovered at the Olympic Base site, SoCalGas will contact the Department within one week. Within one month of the discovery, SoCalGas will submit a written work plan to the Department describing how they propose to assess the nature and areal extent of the contamination, and any potential incremental increase in health risk. If necessary, plans for additional remediation will be submitted after these activities are completed.

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